

CLAIMS:

1. An architecture for performing communications between a remote computer system and a host server over a "connection establishment" type network, the architecture comprising:

- 5 means for initiating a Point-to-Point Protocol (PPP) connection between the remote computer system and the host server;
means for processing and filtering ARP and DHCP packets by the remote computer system; and
means for releasing and renewing a DHCP lease by the remote
10 computer system in order to connect via the latest IP address;
wherein the connection between the host server and the remote computer system will appear as an "always connected" type connection to the remote computer system.

2. The architecture of Claim 1 wherein the means for initiating the
15 PPP connection is configuring the remote computer system with a PPP stack.

3. The architecture of Claim 2 wherein the PPP stack is configured by a driver installed on the remote computer system.

4. The architecture of Claim 1 wherein the means for processing and filtering ARP and DHCP packets is configuring the remote computer system with
20 a DHCP server and an ARP service module.

5. The architecture of Claim 4 wherein the DHCP server and the ARP service module are configured by a driver installed on the remote computer system.

5 6. The architecture of Claim 1 wherein the means for releasing and renewing the DHCP lease is to configure the remote computer system with a DHCP server.

7. The architecture of Claim 6 wherein the DHCP server is configured by a driver installed on the remote computer system.

10 8. An architecture for performing communications between a remote computer system and a host server over a "connection establishment" type network, the architecture comprising:

a Point-to-Point Protocol (PPP) stack configured on the remote computer system;

15 an ARP service module to provide address resolution configured on the remote computer system;

a DHCP server to provide DHCP lease renewal configured on the remote computer system;

20 wherein the PPP stack, the ARP service module, and the DHCP server are configured on the remote computer system such that the connection between the remote computer system and the host server will appear as an "always connected" type connection to the remote computer system.

9. The architecture of Claim 8 wherein the PPP stack maintains dial-up connections between the remote computer system and the host server without intervention from the user of the remote computer system.

10. The architecture of Claim 9 wherein the remote computer system comprises a wireless interface apparatus for providing the connection between the remote computer system and the host server.

11. A method of providing a connection between a remote computer system and a host server over a "connection establishment" type network, the method comprising the steps of:

a) configuring the remote computer system with a Point-to-Point Protocol (PPP) stack;

b) configuring the remote computer system with an Address Resolution Protocol (ARP) service module;

c) configuring the remote computer system with a Dynamic Host Configuration Protocol (DHCP) server; and

d) communicating between the remote computer system and the host system via the "connection establishment" type network while the PPP stack, the ARP service module, and the DHCP server allow the connection to appear as an "always connected" type connection to the remote computer system.

12. The method of Claim 11 further comprising the step of providing connection negotiation with the PPP stack.

13. The method of Claim 12 further comprising the step of processing and filtering ARP and DHCP packets with the ARP service module and the DHCP server respectively.

5 14. The method of Claim 11 wherein the PPP stack, the ARP service module and the DHCP server are modules of a driver and the method further comprises the step of installing the driver in order to configure the remote computer system with the PPP stack, the ARP service module and the DHCP server.